

## ELSEVIER

1600 John F. Kennedy Boulevard • Suite 1800 • Philadelphia, Pennsylvania, 19103-2899  
<http://www.vetsmall.theclinics.com>

**VETERINARY CLINICS OF NORTH AMERICA: SMALL ANIMAL PRACTICE** Volume 52, Number 1  
January 2022 ISSN 0195-5616, ISBN-13: 978-0-323-84920-3

Editor: Stacy Eastman

Developmental Editor: Axell Ivan Jade Purificacion

© 2022 Elsevier Inc. All rights reserved.

This periodical and the individual contributions contained in it are protected under copyright by Elsevier, and the following terms and conditions apply to their use:

### Photocopying

Single photocopies of single articles may be made for personal use as allowed by national copyright laws. Permission of the Publisher and payment of a fee is required for all other photocopying, including multiple or systematic copying, copying for advertising or promotional purposes, resale, and all forms of document delivery. Special rates are available for educational institutions that wish to make photocopies for non-profit educational classroom use. For information on how to seek permission visit [www.elsevier.com/permissions](http://www.elsevier.com/permissions) or call: (+44) 1865 843830 (UK)/(+1) 215 239 3804 (USA).

### Derivative Works

Subscribers may reproduce tables of contents or prepare lists of articles including abstracts for internal circulation within their institutions. Permission of the Publisher is required for resale or distribution outside the institution. Permission of the Publisher is required for all other derivative works, including compilations and translations (please consult [www.elsevier.com/permissions](http://www.elsevier.com/permissions)).

### Electronic Storage or Usage

Permission of the Publisher is required to store or use electronically any material contained in this periodical, including any article or part of an article (please consult [www.elsevier.com/permissions](http://www.elsevier.com/permissions)). Except as outlined above, no part of this publication may be reproduced, stored in a retrieval system or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without prior written permission of the Publisher.

### Notice

No responsibility is assumed by the Publisher for any injury and/or damage to persons or property as a matter of products liability, negligence or otherwise, or from any use or operation of any methods, products, instructions or ideas contained in the material herein. Because of rapid advances in the medical sciences, in particular, independent verification of diagnoses and drug dosages should be made.

Although all advertising material is expected to conform to ethical (medical) standards, inclusion in this publication does not constitute a guarantee or endorsement of the quality or value of such product or of the claims made of it by its manufacturer.

*Veterinary Clinics of North America: Small Animal Practice* (ISSN 0195-5616) is published bimonthly by Elsevier Inc., 360 Park Avenue South, New York, NY 10010-1710. Months of issue are January, March, May, July, September, and November. Business and Editorial Offices: 1600 John F. Kennedy Blvd., Ste. 1800, Philadelphia, PA 19103-2899. Customer Service Office: 3251 Riverport Lane, Maryland Heights, MO 63043. Periodicals postage paid at New York, NY and additional mailing offices. Subscription prices are \$369.00 per year (domestic individuals), \$980.00 per year (domestic institutions), \$100.00 per year (domestic students/residents), \$465.00 per year (Canadian individuals), \$1029.00 per year (Canadian institutions), \$503.00 per year (international individuals), \$1029.00 per year (international institutions), \$100.00 per year (Canadian students/residents), and \$220.00 per year (international students/residents). To receive student/resident rate, orders must be accompanied by name of affiliated institution, date of term, and the *signature* of program/residency coordinator on institution letterhead. Orders will be billed at individual rate until proof of status is received. Foreign air speed delivery is included in all *Clinics* subscription prices. All prices are subject to change without notice. **POSTMASTER:** Send address changes to *Veterinary Clinics of North America: Small Animal Practice*, Elsevier Health Sciences Division, Subscription Customer Service, 3251 Riverport Lane, Maryland Heights, MO 63043. Customer Service (orders, claims, online, change of address): Elsevier Periodicals Customer Service, Elsevier Health Sciences Division Subscription Customer Service 3251 Riverport Lane Maryland Heights, MO 63043. Tel: 1-800-654-2452 (U.S. and Canada); 314-447-8871 (outside U.S. and Canada). Fax: 314-447-8029. E-mail: [journalscustomerservice-usa@elsevier.com](mailto:journalscustomerservice-usa@elsevier.com) (for print support); [journalsonlinesupport-usa@elsevier.com](mailto:journalsonlinesupport-usa@elsevier.com) (for online support).

Reprints. For copies of 100 or more of articles in this publication, please contact the Commercial Reprints Department, Elsevier Inc., 360 Park Avenue South, New York, NY 10010-1710. Tel.: 212-633-3874; Fax: 212-633-3820; E-mail: [reprints@elsevier.com](mailto:reprints@elsevier.com).

*Veterinary Clinics of North America: Small Animal Practice* is also published in Japanese by Inter Zoo Publishing Co., Ltd., Aoyama Crystal-Bldg 5F, 3-5-12 Kitaoyama, Minato-ku, Tokyo 107-0061, Japan.

*Veterinary Clinics of North America: Small Animal Practice* is covered in *Current Contents/Agriculture, Biology and Environmental Sciences*, *Science Citation Index*, *ASCA*, *MEDLINE/PubMed (Index Medicus)*, *Excerpta Medica*, and *BIOSIS*. Printed in the United States of America.